(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAY PRAKASH NARAYAN YADAV): (a) Various reports indicate that the average temperature values of the earth has in the last decade shown increasing trend.

(b) As reported by Defence Research and Development Organisation (DRDO), the seasonal snow cover has been melting in the last few years, the same way it was in the past and it seems that effect is more pronounced on Glaciers. Geological Survey of India (GS1) have reported that most of the glaciers of Himalayas as well as in the other parts of the world are receding and the recession of the glaciers may result due to subnormal snowfall, higher temperature during summer, less severe winter or a combination of all of them. The GSI has further reported that it may also be due to global warming a topic which is still debatable.

(c) and (d) As per GSI, if the present scenario of receding glaciers is accelerated, there may be some reduction in the river discharge. However, it may be noted that the major part of the river discharge is contributed by snow fall and precipitation which is likely to go up with global warming. More melting of glaciers will generate more water initially. Hence there is no likelihood of northern rivers drying up in near future.

Pancheshwar Project

†1042. SHRI HARISH RAWAT: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the work of joint survey of Pancheshwar Project has been completed;

(b) if so, whether any time-frame has been fixed to start this project; and

(c) if not, the details thereof?

THE MINISTER OF STATE. IN THE MINISTRY OF WATER RESOURCES (SHRI JAY PRAKASH NARAYAN YADAV): (a) to (c) India and Nepal have agreed, under the 1996 Mahakali Treaty, to jointly develop the Pancheshwar Multipurpose Project (5600 MW) on the Mahakali River where it forms the border between the two countries. Following the understanding reached between the two countries, it was agreed during 11th meeting of Joint Group of Experts (JGE) held in March, 1999 to carry out necessary field investigations for main dam and re-regulating scheme jointly by India and Nepal. Accordingly, a Joint Project Office-Pancheshwar Investigations was set up at Kathmandu in December, 1999 along with a field Division at Tanakpur in India and the same was closed on 31.7.2002 after completion of joint survey and investigations except for investigation for an alternate site of re-regulating structure at Rupaligad (1.7 km downstream of earlier location).

To finalize the Detailed Project Report (DPR), there are certain outstanding issues like location re-regulating structure *i.e.* Purnagiri or Rupaligad, water availability downstream of Pancheshwar, installation and unit size and assessment of power

† Original notice of the question was received in Hindi.

benefits, apportionment of cost between power and irrigation and between India and Nepal which are yet to be resolved for finalization of Joint DPR.

These issues were discussed in the 20th meeting of the Joint Group of Experts (JGE) of India and Nepal held in October 2004 at New Delhi wherein it was decided to form a Joint Technical Group to look into all such issues. The Group held its first meeting from 20-21 December 2004 at Kathmandu. Thereafter, no further meetings have been held.

Shortage of water in the country

†1043. SHRI AJAY SINGH CHAUTALA: Will the Minister of WATER RESOURCES be pleased to state:

(a) the demand of water for irrigation and drinking purpose in the country at present and the details of its supply, State-wise;

(b) the per capita requirement of potable water in the country and the amount of its supply, State-wise;

(c) the steps taken by Government for supply of water in those States which have shortage of water during last three years; and

(d) the scheme formulated by Government for the next Five Year Plan to meet the shortage of water in the country?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI JAY PRAKASH NARAYAN YADAV): (a) to (d) As per the assessment made in the report of the National Commission for Integrated Water Resources Development Plan, the total utilization of water was 629 billion cubic metre (BCM) in the year 1999 and the same has been projected to be of the order of 710 BCM by the year 2010. The requirements for various purposes including those for irrigation and drinking water supply are met out of the estimated annual water availability of 1869 BCM of which 1123 BCM has been estimated to be utilisable. The assessment of available water resources and utilisable water resources has been made basin-wise.

While assessing the requirement for the year 2010, the National Commission for Integrated Water Resources Development Plan has adopted the *per capita* requirement for Domestic Water Supply as 220 litres per capita per day (Lpcd) for Class-I cities, 150 Lpcd for cities other that Class-I and 55 Lpcd for rural areas.

The planning for water resources are carried out on the basis of long term assessment of water availability and water requirement. Keeping in view the overall water availability and particularly the quantum of utilisable water, shortage of water is not anticipated in the country as a whole during the next five years. However, the Working Group for Water Resources for Eleventh Five Year Plan constituted by the Planning Commission has laid due emphasis on developmental activities, management practices and research and development efforts. The Working Group has recommended various measures which *inter-alia* include completion of all ongoing water resources development projects in a time bound manner.

---

† Original notice of the question was received in Hindi